Nos. 14-46; 14-47; 14-49

Supreme Court, U.S.
FILED
OCT 15 2014
OFFICE OF THE CLERK

IN THE

Supreme Court of the United States

STATE OF MICHIGAN, *et al.*,
Petitioners,

and

UTILITY AIR REGULATORY GROUP,
Petitioner,

and

NATIONAL MINING ASSOCIATION,
Petitioner,

v.

ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Respondents.

ON PETITIONS FOR WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF IN OPPOSITION OF RESPONDENTS AMERICAN ACADEMY OF PEDIATRICS, *ET AL.*

SEAN H. DONAHUE
Counsel of Record
DAVID T. GOLDBERG
DONAHUE & GOLDBERG, LLP
1130 Connecticut Avenue, NW
Suite 950
Washington, D.C. 20036
(202) 277-7085
sean@donahuegoldberg.com

Counsel for Respondents American Academy of Pediatrics, et al.

(Additional counsel listed in signature block)

QUESTION PRESENTED

The 1990 Clean Air Act Amendments directed EPA to complete, by 1993, a study of the "the hazards to public health" resulting from electric utility steam generating units' (EGUs') emissions of specified hazardous air pollutants "after imposition of the requirements" of the Clean Air Act, and provided that the agency "shall regulate" EGUs under 42 U.S.C. 7412 if, "after considering the results of the study," the Administrator finds such regulation "appropriate and necessary." *Id.* 7412(n)(1)(A). Based on the required study and extensive additional research, EPA found that EGUs are by far the largest emitters of numerous congressionally-listed hazardous pollutants such as mercury, arsenic, chromium, and acid gases; that these emissions continue to pose serious health hazards; and that effective control techniques are available; and, accordingly, determined that regulation is "appropriate and necessary."

The question presented is whether it was reasonable for the Administrator to interpret the "appropriate and necessary" provision as not requiring consideration of compliance costs in determining whether to regulate EGUs, where: (1) that provision explicitly refers to public health hazards but is silent on costs; (2) costs may not be considered in determining which pollutants and other source categories are regulated under section 7412 or whether a pollutant or a source category may be removed from regulation; and (3) numerous provisions in the same statutory section expressly require consideration of costs, including in the setting of emissions standards.

RULE 29.6 STATEMENT

Respondents American Academy of Pediatrics, American Lung Association, American Nurses Association, American Public Health Association, Chesapeake Bay Foundation, Citizens for Pennsylvania's Future, Clean Air Council, Conservation Law Foundation, Environment America, Environmental Defense Fund, Izaak Walton League of America, National Association for the Advancement of Colored People, Natural Resources Council of Maine, Natural Resources Defense Council, Ohio Environmental Council, Physicians for Social Responsibility, Sierra Club, and Waterkeeper Alliance, all of which were respondent-intervenors in the court of appeals, are nonprofit public interest organizations. None of them has any corporate parent, and no publicly held corporation owns an interest in any of them.

TABLE OF CONTENTS

QUESTIONS PRESENTED i

RULE 29.6 DISCLOSURE STATEMENT ii

TABLE OF CONTENTS iii

TABLE OF AUTHORITIES v

INTRODUCTION 1

STATEMENT 3

REASONS FOR DENYING THE PETITIONS 7

I. THE D.C. CIRCUIT'S DECISION, CORRECTLY SUSTAINING AS "REASONABLE" EPA'S ONE-TIME INTERPRETATION OF A SINGULAR PROVISION, DOES NOT RAISE ANY QUESTION WARRANTING THIS COURT'S REVIEW 7

A. There Is No Decisional Conflict 7

B. The Appeals Court Decision Is Correct 8

II. PETITIONERS' CHARACTERIZATIONS OF THE HEALTH HARMS AND BENEFITS ARE FALSE AND OVERWHELMINGLY REFUTED BY THE RECORD BEFORE EPA 17

A. The Administrative Record Refutes Petitioners' Efforts to Trivialize the Serious Harms Caused by EGU Emissions of Congressionally-Designated Hazardous Air Pollutants 18

B. EPA's Assessment of Quantified Costs and Benefits Demonstrates that Petitioners' Portrayals of the Rule's Economic Impacts Are Wrong 23

CONCLUSION 26

TABLE OF AUTHORITIES

Cases:

Am. Petroleum Inst. v. Costle,
665 F.2d 1176 (D.C. Cir. 1981) 12

Am. Textile Mfrs. Inst. v. Donovan,
452 U.S. 290 (1981) 8

Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S,
132 S. Ct. 1670 (2012) 13

Chevron, U.S.A. Inc. v. NRDC,
467 U.S. 837 (1984) ..... *passim*

City of Arlington v. FCC,
133 S. Ct. 1864 (2013) 8

City of Chicago v. Envtl. Def. Fund,
511 U.S. 328 (1994) 13

Dean v. United States,
556 U.S. 568 (2009) 14

Entergy Corp. v. Riverkeeper, Inc.,
556 U.S. 208 (2009) 8,9,16

EPA v. EME Homer City Generation, L.P.,
134 S. Ct. 1584 (2014) 8,9

Lead Indus. Ass'n, Inc. v. EPA,
647 F.2d 1130 (D.C. Cir. 1980) 12

Lopez v. Davis,
531 U.S. 230 (2001) 13

Mississippi ex rel. Hood v. AU Optronics Corp.,
134 S. Ct. 736 (2014) 12,13

Nat'l Lime Ass'n v. EPA,
233 F.3d 625 (D.C. Cir. 2000) 21

Natural Res. Def. Council v. EPA,
529 F.3d 1077 (D.C. Cir. 2008) 19

New Jersey v. EPA,
517 F.3d 574 (D.C. Cir. 2008), *cert. denied sub nom. Util. Air Reg. Grp. v. New Jersey*,
555 U.S. 1169 (2009) 5

Sierra Club v. EPA,
479 F.3d 875 (D.C. Cir. 2007) 21

Sossamon v. Texas,
131 S. Ct. 1651 (2011) 10

Union Elec. Co. v. EPA,
427 U.S. 246 (1976) 13

Util. Air Reg. Grp. v. EPA,
134 S. Ct. 2427 (2014) 9

Whitman v. Am. Trucking Ass'ns, Inc.,
531 U.S. 457 (2001) ..... *passim*

Statutes:

42 U.S.C. 7409(b). 18

42 U.S.C. 7410. 18

42 U.S.C. 7411. 16

42 U.S.C. 7411(a)(1). 14

42 U.S.C. 7411(b). 14

42 U.S.C. 7411(d). 5

42 U.S.C. 7412. ..... *passim*

42 U.S.C. 7412(b). ..... *passim*

42 U.S.C. 7412(b)(1). 11,19

42 U.S.C. 7412(b)(2). 11

42 U.S.C. 7412(b)(3)(B). 3

42 U.S.C. 7412(c). 3,5,11

42 U.S.C. 7412(c)(1). 11,22

42 U.S.C. 7412(c)(2). 4

42 U.S.C. 7412(c)(5). 4

42 U.S.C. 7412(c)(9). 5

42 U.S.C. 7412(c)(9)(B). 14

42 U.S.C. 7412(c)(9)(B)(i). 9,12,19

42 U.S.C. 7412(c)(9)(B)(ii). 9,12

42 U.S.C. 7412(d)(2). 4,6,13,14

42 U.S.C. 7412(d)(3)(A). 4

42 U.S.C. 7412(d)(3)(B). 4
42 U.S.C. 7412(d)(8)(A)(i)..... 4,13
42 U.S.C. 7412(f)(1)(B). 13
42 U.S.C. 7412(f)(2)(A). 13
42 U.S.C. 7412(n). 15
42 U.S.C. 7412(n)(1)(A). .....*passim*
42 U.S.C. 7412(n)(1)(B). 4
42 U.S.C. 7521(a)(1). 14
42 U.S.C. 7521(a)(2). 14
42 U.S.C. 7651..... 4
Pub. L. No. 91-604..... 3

Administrative Materials:

65 Fed. Reg. 79,825 (Dec. 20, 2000)..... 4,5,20
70 Fed. Reg. 28,606 (May 18, 2005) 5
76 Fed. Reg. 24,976 (May 3, 2011) .....*passim*
77 Fed. Reg. 9304 (Feb. 12, 2012).....*passim*

Legislative History:

House Rep. No. 101-490 (1990) 19

Miscellaneous:

Christopher C. DeMuth & Douglas H. Ginsburg, *Rationalism in Regulation*, 108 Mich. L. Rev. 877 (2010) 24

Energy Information Administration, *Coal-Fired Power Plant Operators Consider Emissions Compliance Strategies*, Today in Energy (March 28, 2014) 25

E.J. Mishan & Euston Quah, *Cost Benefit Analysis* (5th ed. 2007) 24

Executive Order 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993) 6,17,24

Executive Order 13,563, 76 Fed. Reg. 3821 (Jan. 18, 2011) 6,17,24

Nat'l Ctr. For Envtl. Econ., EPA, *Guidelines for Preparing Economic Analyses* (2010) 24

Office of Management and Budget, *Circular A-4* (Sept. 17, 2003) 24

Richard L. Revesz & Michael A. Livermore, *Retaking Rationality* (2008) 24

Webster's Third New International Dictionary (1993) 10

Petitioners seek this Court's review of a D.C. Circuit decision upholding the Environmental Protection Agency's Mercury and Air Toxics Standards ("Air Toxics Rule"), regulations promulgated under the Clean Air Act to limit emissions of hazardous air pollutants from coal- and oil-fired electric generating units, or "EGUs." EGUs are by far the largest source of this toxic air pollution, annually emitting over 386,000 tons of 84 separate compounds designated by Congress as "hazardous" for purposes of Clean Air Act regulation, including arsenic, cadmium, chromium, nickel, selenium, hydrochloric acid gas, and mercury. Based upon a voluminous record including congressionally-mandated scientific studies, EPA concluded that regulation of hazardous air pollutants from EGUs was "appropriate and necessary" within the meaning of 42 U.S.C. 7412(n)(1)(A), and promulgated emissions standards based on emissions levels that scores of EGUs were already meeting. The court of appeals, applying familiar review standards, upheld the Air Toxics Rule.

Lacking any conventional grounds for reviewing this unexceptionable—and entirely correct—application of this Court's "reasonableness" test under *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984), to a federal agency's once-only construction of a singular statutory provision, petitioners strain to depict this case as raising questions not remotely presented by the rulemaking record or ruling below. In fact, EPA did not argue and the appellate court did not announce a categorical rule that administrative agencies may never consider compliance costs under statutory provisions that are silent on the subject. Furthermore, the record overwhelmingly refutes petitioners' repeated refrains that the Air Toxics Rule is an instance of costly regulation imposed for trivial benefits.

EPA concluded only that costs should not be considered in the threshold determination whether it was "appropriate and necessary" to regulate a statutorily-defined category of stationary sources of hazardous pollutants and fully recognized that costs *are* a significant factor to be considered

in determining the *extent* of emission controls to be applied to those same sources. The court of appeals, moreover, held only that EPA's interpretation of the scope of its threshold inquiry was "permissible" in light of statutory ambiguity, not that EPA was precluded from consideration of costs. The court, moreover, rested its ruling on the specific structure and wording of section 7412(n)(1)(A) and the surrounding text, in which Congress had explicitly required EPA to consider costs in making some determinations, yet remained silent with regard to others, including the conspicuous omission of any reference to cost with regard to the threshold determination. As the court of appeals explained, numerous additional features of the statutory context pointedly support the permissibility of EPA's conclusion, including the unmistakably health-protective emphasis of Congress's hazardous pollutant regime and the congressional prescription for the scientific study that must precede EPA's decision under 42 U.S.C. 7412(n)(1)(A), one addressing "hazards to public health" from EGU emissions.

Likewise lacking any merit are petitioners' repeated suggestions that EPA promulgated and the court of appeals upheld a rule that in operation imposes massive costs for only trivial benefit. Even assuming that this Court's role were that of a super-OMB, policing for allegedly inefficient regulation, the rulemaking here is no such thing. The Air Toxics Rule's public health benefits are huge, not trivial: it addresses a category of sources that is by far the largest emitter of hazardous pollutants and, in the case of many pollutants such as mercury, arsenic, and acid gases, the Rule will result in substantial reductions in total United States emissions of these congressionally-listed toxins (in some instances, by more than half). In the Regulatory Impact Analysis from which petitioners selectively borrow, EPA found (1) that the Rule would annually prevent thousands of premature deaths, heart attacks, and asthma attacks, and that health benefits that could be monetized would exceed the costs many times over, and (2) that these represent only a subset of the Rule's total

benefits. The benefits to which EPA did not assign a monetary value include reduced cancer risks, which were difficult to monetize but, as the statutory text makes plain, at the core of Congress's concern in enacting the air toxics provisions. Petitioners' efforts to dismiss the importance of the dramatic reductions in emissions of congressionally-designated pollutants cannot be reconciled with the Clean Air Act or the scientific and technical record before EPA.

STATEMENT

Congress first regulated hazardous air pollutants in the 1970 Clean Air Act, which directed EPA to conduct individual rulemakings to list as "hazardous" any pollutant that "may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness," and then to set standards for such pollutants. Pub. L. No. 91-604, Sec. 4(a) (new Clean Air Act Sec. 112(a)(1)), 83 Stat. 1685 (1970); see Pet. App. in No. 14-49 8a (hereinafter "App."). That regime, understood to require EPA to determine the risks from each individual pollutant and source category, became mired in severe regulatory delays, such that, by the late 1980s, EPA had established standards for only a few of the scores of known air toxins from a few source categories. See App. 8a–9a.

Congress overhauled the Nation's hazardous air pollutant program in the 1990 Clean Air Act amendments, establishing mandatory obligations to regulate sources of hazardous air pollutants, strict deadlines for doing so, and a new framework for the standards themselves. App. 9a–10a. In revised Section 112, Congress itself listed 189 compounds as hazardous air pollutants warranting Clean Air Act regulation, 42 U.S.C. 7412(b), and required EPA to list every other compound "known to cause or [that] may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects," *id.* 7412(b)(3)(B). Congress also required EPA to publish a list of source categories of these pollutants, *id.* 7412(c), and promptly to promulgate emissions

standards reflecting the "maximum degree of reduction in emissions of the hazardous air pollutants," *id.* 7412(d)(2). See also *id.* 7412(c)(2), (c)(5) (requiring promulgation of standards within two years of listing a source category). The statute directs that these emissions limitations at least reach the level of the best-performing twelve percent of sources in the source category, *id.* 7412(d)(3)(A), (B), and beyond that, to the full extent the Administrator, "taking into consideration the cost of achieving such emissions reduction" and other factors, "determines to be achievable." *Id.* 7412(d)(2).

For electric steam generating units ("EGUs"), Congress directed that EPA, within three years of 1990, complete a study of "the hazards to public health reasonably anticipated to occur as a result of emissions by [EGUs of pollutants listed under 7412(b)] after imposition of the requirements of this chapter." 42 U.S.C. 7412(n)(1)(A).[1] Congress instructed that "[t]he Administrator shall regulate [EGUs] under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph." *Id.*

EPA completed the required study of health effects of EGU hazardous pollutant emissions (known as the Utility Study) in 1998 (well after Congress's 1993 deadline). On the basis of an extensive record that also included two other statutorily-mandated and peer-reviewed studies under section 7412(n)(1)(A) and (B), as well as a congressionally-required National Academy of Sciences study on the toxicological effects of methylmercury, EPA concluded in 2000 that regulation of hazardous air pollutant emissions from EGUs "is appropriate and necessary." 65 Fed. Reg. 79,825 (Dec. 20, 2000). The agency determined that it was "appropriate" to

---

[1] In the 1990 Amendments, Congress also adopted Title IV, the Acid Rain Program, which addresses sulfur dioxide emissions from electric generating units. 42 U.S.C. 7651-7651o. While sulfur dioxide is not a listed hazardous air pollutant, it was understood in 1990 that steps to reduce sulfur dioxide emissions could also reduce emissions of hazardous air pollutants. See 76 Fed. Reg. 24,976, 24,990 (May 3, 2011).

regulate EGUs because, among other reasons, EGU mercury emissions pose a serious hazard to public health and the environment and because several other hazardous metals emitted by EGUs pose cancer risks. *Id.* at 79,827. EPA concluded that such regulation was "necessary" because imposition of other requirements of the Clean Air Act would not sufficiently address these hazards. *Id.* at 79,830. Accordingly, EPA added coal- and oil-fired EGUs to the section 7412(c) list of source categories to be regulated. 65 Fed. Reg. at 79,830-31. See also 76 Fed. Reg. at 24,997.

After another long delay,[2] EPA proposed regulations for hazardous air pollutants from EGUs in 2011. 76 Fed. Reg. at 24,976. EPA reviewed the basis for the 2000 finding as well as significant new scientific studies and data from the intervening years. EPA reaffirmed its 2000 finding and its decision to list EGUs, and promulgated emissions standards for EGUs. 77 Fed. Reg. 9304, 9310-11 (Feb. 12, 2012). See 76 Fed. Reg. at 25,000-16 (discussing the extensive scientific research concerning the health impacts of the toxic pollutants emitted by EGUs); 77 Fed. Reg. at 9336 (discussing studies completed since the 2000 finding "that confirm serious health risks from [hazardous air pollutant] exposure").

In the rulemaking, EPA concluded that section 7412(n)(1)(A) was best interpreted as not requiring the Agency to evaluate the costs of regulation as part of the initial decision *whether* to regulate EGUs' emissions of hazardous

---

[2] EPA in 2005 attempted to "delist" EGUs, and, instead of section 7412 standards, to regulate mercury emissions from EGUs pursuant to a new cap-and-trade program promulgated under a separate provision of the Act (42 U.S.C. 7411(d)), one that applies to pollutants *not* listed under section 7412(b), see 70 Fed. Reg. 28,606 (May 18, 2005). Noting EPA's acknowledgment that it had not made the findings required under 42 U.S.C. 7412(c)(9) for delisting source categories, the D.C. Circuit vacated the delisting decision and the related agency actions. *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008), *cert. denied sub nom. Util. Air Reg. Grp. v. New Jersey*, 555 U.S. 1169 (2009). *Cf.* UARG 13 (incorrectly describing the rulemaking at issue here as a "remand rulemaking").

pollutants. EPA instead rested that decision on the health and environmental hazards still evident both in 2000 and in 2011 and the continued need for regulation, notwithstanding implementation of other Clean Air Act provisions. *E.g.*, 77 Fed. Reg. at 9323-24. In its Regulatory Impact Analysis pursuant to Executive Orders 12,866 and 13,563, however, EPA concluded that, even excluding reductions in cancer risk and other important health and other public benefits that could not be assigned a monetary value, the Rule's benefits would be many times its costs, see 77 Fed. Reg. at 9305-06 (estimating annual costs of $9.6 billion and benefits of $33-90 billion).

Upon petitions for review filed by industry, States, and environmental groups, the D.C. Circuit upheld the Air Toxics Rule in its entirety. With respect to challengers' claims that EPA was required to consider costs, the panel found EPA's interpretation of the statute to be "clearly permissible" under *Chevron*, noting, *inter alia*, that numerous other parts of section 7412 explicitly require EPA to consider cost, but that section 7412(n)(1)(A) does not; that the mechanism for delisting sources does not allow consideration of cost; and that, under the statutory design, cost considerations come into play not at the initial listing phase, but rather in the setting of standards under section 7412(d)(2). Judge Kavanaugh dissented on the cost point.

REASONS FOR DENYING THE PETITIONS

I. THE D.C. CIRCUIT'S DECISION, CORRECTLY SUSTAINING AS "REASONABLE" EPA'S ONE-TIME INTERPRETATION OF A SINGULAR PROVISION, DOES NOT RAISE ANY QUESTION WARRANTING THIS COURT'S REVIEW

A. There Is No Decisional Conflict

The D.C. Circuit panel's decision does not conflict with any decision of this Court or of any other court of appeals. The decision concerns EPA's interpretation of a statutory provision, 42 U.S.C. 7412(n)(1)(A), that applies only to EGUs, and that addressed the time-sensitive interplay between the mandatory regulatory regime for hazardous air pollutants established in 1990 and the then-new and EGU-specific Acid Rain Program that Congress established the same year. The court of appeals' decision was based upon the familiar *Chevron* analysis and on the particular features of section 7412(n)(1)(A) and the statutory hazardous pollutant regime into which it fits, rather than (as petitioners would have it) on abstract generalities about the role of cost in agency decision-making. The court's particularized statutory construction ruling has scant continuing or general significance.

One petitioner complains that this Court has "never squarely faced, much less resolved" the extent to which an agency may be compelled to rely on cost when it "is not expressly *precluded* by Congress from taking costs into consideration." Utility Air Regulatory Group (UARG) Pet. 30. But the absence of a categorical pronouncement on the point is a reflection not of this Court's furtiveness, but of the reality that the issue has not been developed (let alone engendered controversy) among the lower courts: UARG is unable to cite even a single court of appeals decision that conflicts with the decision below. The panel below simply *did not* rely on any global rule about treatment of cost in "administrative law," National Mining Association (NMA)

Pet. 6, but instead properly grounded its decision in *Chevron* and in a careful analysis of the particular textual details and statutory context of the unique statutory provision at issue here. It is, in fact, petitioners who seek an inflexible, acontextual, and peremptory new rule requiring cost consideration—a rule that cannot be reconciled with what the Court *has* long said and done in this area, with the separation of powers principles animating *Chevron*, nor with the expectations of Congresses that know full well how to speak "directly," *Chevron*, 467 U.S. at 843-44, and in "plain terms," *City of Arlington v. FCC*, 133 S. Ct. 1864, 1868 (2013), on the subject of cost.

B. The Appeals Court Decision Is Correct

The D.C. Circuit's ruling that EPA was not obligated to consider cost in deciding whether to list EGUs under Section 7412(n)(1)(A) is correct and unworthy of this Court's review. This Court "routinely accord[s] dispositive effect to an agency's reasonable interpretation of ambiguous statutory language." *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1603 (2014). Since even petitioners acknowledge that the statute does not speak "directly" to the "precise question" of cost, the question for the reviewing court was merely whether EPA's reading is "a reasonable interpretation of the statute—not necessarily the only possible interpretation, nor even the interpretation deemed *most* reasonable by the courts." *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 218 (2009) (citing *Chevron*, 467 U.S. at 843-44). The provision here—directing that EPA regulate toxic pollutants if it determines that doing so is "appropriate and necessary" after conducting a formal study of potential health hazards—is a classic delegation to an expert agency.

"[U]nder *Chevron*, that an agency is not *required* to [consider costs] does not mean that an agency is not *permitted* to do so." *Entergy*, 556 U.S. at 223 (discussing *Am. Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490 (1981)). So too, decisions holding that statutory silence did not *preclude* EPA

from considering costs supply no authority for the cost-*mandating* rule petitioners seek here. See *Entergy*, 556 U.S. at 222 (construing Clean Water Act provision's silence concerning cost "to convey nothing more than a refusal to tie the agency's hands as to whether cost-benefit analysis should be used, and if so to what degree"). This Court's decisions have emphasized a point that petitioners' arguments ignore: namely, that the permissible role of cost in a particular regulatory decision depends centrally upon "statutory context." *Entergy Corp.*, 556 U.S. at 223; *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 466–67 (2001).[3]

The statutory context in which the cost question arises here—EPA's decision not to consider cost in determining whether to regulate the Nation's largest sources of toxic pollutants—lopsidedly favors the reasonableness of EPA's

---

[3] Last Term's Clean Air Act decisions provide no support for the petitions here. In *Util. Air Reg. Grp. v. EPA*, 134 S. Ct. 2427 (2014) (cited by UARG 25, 27, 35; NMA 15, 16), EPA had found that two Clean Air Act permitting programs would, as applied to sources of greenhouse gas emissions, yield a vast expansion of coverage, one that would have been "unrecognizable" to the enacting Congress, 134 S. Ct. at 2437; the agency attempted to solve that problem through far-reaching administrative exemptions. *UARG* concluded that the acknowledged mismatch rendered unreasonable EPA's reading of the statute to cover sources solely by reason of their greenhouse gas emissions. *Id.* at 2444. There is no such mismatch here: The Toxics Rule applies to the largest emitters of hazardous pollutants designated by Congress for regulation, it relies on control technologies already in place, and administration and compliance are readily feasible.

Amicus Chamber of Commerce (Br. 13–14) invokes *EME Homer City*, 134 S. Ct. 1584, in which this Court *upheld*, under *Chevron*, an EPA rule that relied in part upon compliance costs in assigning States' responsibilities for abating interstate air pollution. Like *Entergy*, *EME Homer* did not *mandate* reliance on cost, but merely upheld EPA's discretion under *Chevron* to consider cost in implementing an ambiguous statutory provision. Moreover, in *EME Homer*, cost did not function as a counterweight to public health concerns, *cf. Am. Trucking Ass'ns*, 531 U.S. at 468, but as a tool for allocating upwind States' respective abatement responsibilities to help their neighbors meet an independently fixed health-based target. See 134 S. Ct. at 1607.

position. The statute provides that EPA "shall" regulate electric utility steam generating units under section 7412 if the Administrator finds such regulation "appropriate and necessary" after considering the results of a study, to be completed within three years, assessing "the hazards to public health reasonably anticipated to occur as a result of emissions by [EGUs] of pollutants listed under subsection (b) of this section after imposition of the requirements of this chapter." This language makes clear that Congress meant to assign the decision whether to regulate EGUs to EPA's expert judgment, with the agency's consideration focused upon health impacts remaining after implementation of other statutory provisions. Moreover, Congress did not use "appropriate" as a term of limitation, *i.e.*, that EPA *may* regulate only upon showing that doing so is "appropriate." Rather, the statute directs that EPA "shall" regulate and specifies a single "consideration"—the health effects revealed by the study—that informs "appropriateness."

Without any statutory text requiring EPA to rely on costs, petitioners are relegated to arguing that the term "appropriate" must be read to impose an unambiguous cost-consideration mandate (and indeed, the particular, thumb-on-the-scale version they proffer, see *infra*). NMA 16-18; UARG 23-24. But the term "appropriate" is "open-ended and ambiguous" and "inherently context-dependent." *Sossamon v. Texas*, 131 S. Ct. 1651, 1659 (2011). See *id.* (quoting definition as "specially suitable: fit, proper" from Webster's Third New International Dictionary 106 (1993)); *Am. Trucking*, 531 U.S. at 466 ("Words that can have more than one meaning are given content . . . by their surroundings.").

Numerous features of the context here provide overwhelming support for the reasonableness of EPA's interpretation:

First, while section 7412(n)(1)(A) is silent on consideration of costs, it instructs that EPA's "appropriate and necessary" decision follow "consider[ation of]" the study

of *public health* hazards "reasonably anticipated to occur" from EGUs' emissions of listed hazardous air pollutants "after imposition of the requirements of this chapter." The specific mandate for the Utility Study provides a pointed indication that the 1990 Congress (1) was concerned with the health impacts (including potential ones) of EGUs' emissions of the listed hazardous pollutants and (2) wanted EPA to assess whether these remained after imposition of other requirements of the Act (which, as noted, included a major new program enacted in 1990, Title IV, addressing EGUs' emissions of sulfur dioxide).

Second, section 7412(n)(1)(A) is part of a comprehensive congressional overhaul of the air toxics program, which deals with the most dangerous air pollutants. In that provision, Congress itself listed scores of specific contaminants and required that new and existing sources of those toxic substances be regulated according to strict timelines (and *without regard to cost*). See, *e.g.*, 42 U.S.C. 7412(b)(1) (enumerating, as part of the "initial list" of hazardous air pollutants, "Acetaldehyde," "Acrolein," "Benzene," "Hydrochloric acid," "Hydrogen fluoride," "Ethylene dichloride," "Formaldehyde," "Polychlorinated biphenyls," "Arsenic Compounds," "Cadmium Compounds," "Chromium Compounds," "Lead Compounds," "Manganese Compounds," "Mercury Compounds," "Nickel Compounds," "Polycyclic Organic Matter," and "Selenium Compounds"); 77 Fed. Reg. at 9444 (noting that Air Toxics Rule will reduce emissions of each of these hazardous pollutants). Costs are not considered in the listing of air pollutants for regulation—whether accomplished by Congress itself, 42 U.S.C. 7412(b)(1), or by EPA based upon a statutory standard that turns solely on adverse health or environmental effects, *id.* 7412(b)(2). Similarly, costs cannot be considered in the listing of categories of sources other than EGUs. See *id.* 7412(c)(1) (requiring listing of sources based solely on quantity of annual emissions). And the exclusive statutory mechanism for removing "any" source category from the

section 7412(c) list sets forth health-based criteria, not cost ones. For source categories that emit hazardous air pollutants that may present a risk of cancer in humans, delisting is allowed only when "no source in the category . emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source." *Id.* 7412(c)(9)(B)(i). See *id.* 7412(c)(9)(B)(ii) (standard for hazardous pollutants without cancer risk turns on finding that "emissions from no source in the category" would exceed a level "adequate to protect public health with an ample margin of safety and no adverse environmental effect will result from emissions from any source").

Like other familiar provisions of the Clean Air Act, section 7412 is manifestly focused upon protecting public health. As in *American Trucking*, cost consideration is in inherent tension with that overriding statutory concern. See 531 U.S. at 469 ("[T]he cost factor is *both* so indirectly related to public health *and* so full of potential for canceling the conclusions drawn from direct health effects that it would surely have been expressly mentioned . . . had Congress meant it to be considered.").

Indeed, the regime petitioners insist is the only "reasonable" and "permissible" one under section 7412 is in fact a deeply incongruous one, where Congress itself listed toxic pollutants, mandated their regulation (and precluded deregulation, absent the most compelling showing), and required the "*maximum* degree of reduction in emissions" from all listed sources, but then exempted EGUs, the very largest emitters of these very dangerous substances, from regulation if compliance would be expensive. Such a regime, moreover, runs counter to a long history rejecting *implicit* cost-based counterweights to Clean Air Act health standards—reflected in leading judicial decisions well before 1990, see *Lead Indus. Ass'n, Inc. v. EPA*, 647 F.2d 1130, 1148 (D.C. Cir. 1980) ("Where Congress intended the

Administrator to be concerned about economic and technological feasibility, it expressly so provided."); *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176, 1185 (D.C. Cir. 1981); see also *Am. Trucking*, 531 U.S. at 464 (discussing these cases). It is just not plausible to claim that Congress, legislating in 1990 with these high-profile decisions on the books, chose to *mandate* consideration of compliance costs in this health-sensitive context without saying so.

Third, the repeated explicit mentions of cost elsewhere in section 7412 powerfully supports EPA's construction. As the court of appeals observed, "[t]hroughout § [7412], Congress mentioned costs explicitly where it intended EPA to consider them." App. 24a (citing 42 U.S.C. 7412(d)(2), 7412(d)(8)(A)(i), 7412(f)(1)(B), 7412(f)(2)(A)). Section 7412(d)(2), for example, directs EPA to set standards requiring the maximum degree of reduction that is "achievable," "*taking into consideration the cost* of achieving such emissions reduction." (emphasis added). The multiple provisions of the very same section that "explicitly permitted or required economic costs to be taken into account," *Am. Trucking*, 531 U.S. at 467, contradict petitioners' arguments here that section 7412(n)(1)(A), despite its silence, unambiguously *requires* EPA to consider cost.[4] Indeed, this Court has regularly found the "disparate inclusion or

---

[4] While petitioners insist that section 7412(n)(1)(A) is "distinguishable from" (Michigan 18) the provision found unambiguously to *prohibit* cost consideration in *American Trucking*, this Court's emphasis on Congress's express mentions of cost in the same statute reflected a common technique of textual analysis, *e.g.*, *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 132 S. Ct. 1670, 1682 (2012) (adverse inference created when statute used key term in "the very next subclause, enacted at the very same time"); *Lopez v. Davis*, 531 U.S. 230, 241 (2001) (noting significance in Congress's disparate use of "may" and "shall" "in the very same section"); *City of Chicago v. Envtl. Def. Fund*, 511 U.S. 328, 338 (1994), and *American Trucking*'s discussion of the background informing the interpretation of Clean Air Act provisions protecting human health, 531 U.S. at 465-67, strongly supports the reasonableness of EPA's conclusion that it was not *required* to consider costs here. See also *Union Electric Co. v. EPA*, 427 U.S. 246, 257 & n.5 (1976).

exclusion" of "particular language" in the same section of the statute, *Mississippi ex rel. Hood v. AU Optronics Corp.*, 134 S. Ct. 736, 742 (2014) (citing *Dean v. United States*, 556 U.S. 568, 573 (2009)), to be strong evidence of Congress's intent.

Fourth, the particular *way* compliance costs are incorporated in the section 7412 regime is a familiar one under the Clean Air Act, and strongly supports the conclusion that Congress did not mean to require that the initial decision whether to regulate EGUs at all turn on costs.

The minimum standard that all existing sources must meet—the "MACT floor"—is set based upon a market test of achievability, namely, the actual performance of the best-performing 12 percent of sources. 42 U.S.C. 7412(d)(3)(A). In considering standards more stringent than that minimum, EPA must "tak[e] into consideration the cost of achieving such emission reduction," *id.* 7412(d)(2). But while cost plays a central role in setting MACT standards, cost considerations are not a basis for sources to escape regulation—as noted, the statutory standards for "delisting" source categories are based upon health and environmental factors alone, see 7412(c)(9)(B).

Congress, therefore, clearly contemplated and provided that costs *would be* considered in regulating hazardous air pollutant emissions, but in a carefully calibrated way that resembles what Congress did in several other prominent Clean Air Act provisions that similarly base the initial decision *whether* to regulate on health or environmental findings, but then provide for consideration of cost in *setting the regulatory standards* with which sources must comply. See, *e.g.*, 42 U.S.C. 7411(a)(1) and 7411(b) (providing for regulation of stationary sources based upon a non-cost-based finding of endangerment of "public health or welfare," but expressly requiring consideration of cost in setting "standards of performance"); *id.* 7521(a)(1), (a)(2) (providing for regulation of motor vehicle emissions based on non-cost endangerment finding, but requiring that cost be considered in formulating

emissions standards). See also *Am. Trucking*, 531 U.S. at 470-71 (explaining that cost cannot be considered in formulating air quality standards under 42 U.S.C. 7409(b), but is a proper factor in implementing such standards under section 7410). The structure of section 7412(n)—with a health-focused threshold finding followed by consideration of costs in setting or implementing standards—resembles that of these other provisions.[5]

Finally, the suggestion that the term "appropriate" *must* include cost consideration here in order to "give any meaning to that term" (Michigan 13) is obviously wrong. As the panel explained, App. 28a, under EPA's construction, regulation of hazardous air pollutant emissions from EGUs would be "appropriate" if the agency found a significant hazard to public health from EGUs' emissions of section 7412(b)-listed pollutants. It was not known, in 1990, whether that would be the case after implementation of other Clean Air Act requirements. EPA analyzed whether other Clean Air Act programs would obviate the need for regulation of EGUs under section 7412 and concluded that, in fact, a health threat existed, 77 Fed. Reg. at 9310-11, 9328-29, and explained that "several available control options would effectively reduce [hazardous air pollutant] emissions from U.S. EGUs," *id.* at 9335. See also 76 Fed. Reg. at 25,013-14 (technology assessment discussing availability of effective means to control hazardous air pollutant emissions from EGUs).

And while petitioners take repeated sideswipes at EPA's scientific determinations and methodology, *e.g.* NMA 3, 13 (questioning scientific support for EPA's conclusion that acid gases are harmful to public health), *id.* 12-13 (critiquing EPA's methodology regarding what NMA calls "trace"

---

[5] Structuring regulation in this way also allows the agency to focus the decision whether to regulate on the scientific record without having first developed extensive information concerning the technical details and costs of potential regulatory standards.

hazardous metal pollutants and acid gases), they do not venture to ask this Court to grant certiorari to review EPA's scientific and technical judgments, which are, in any event, supported by voluminous record evidence.[6]

The panel below did *not* hold that an explicit statutory command is invariably required before an agency may be required to consider compliance costs. It recognized what this Court's cases teach: that, as with any other factor, an administrative agency's duties with respect to consideration of costs depend upon context—the text, structure, and purposes of the governing statute. See, *e.g.*, *Entergy*, 556 U.S. at 223. The panel majority held that there are multiple features of the unique statutory regime set forth in 42 U.S.C. 7412(n)(1)(A) that rendered EPA's approach at least reasonable. That decision was richly supported by a wealth of statutory detail. It was neither ground-breaking nor broad in sweep. It does not warrant further review.[7]

---

[6] For its part, UARG cites pre-1990 statements by EPA that EGU mercury emissions did not cause "ambient mercury concentrations" to exceed a health-protective level. UARG 6 (citing 1987 and 1975 rules). At most, these statements prove nothing, since they preceded EPA's exhaustive studies pursuant to the 1990 Amendments of the health impacts of EGU emissions; moreover, as petitioner is aware, the principal health hazard posed by mercury emissions is *not* "ambient concentrations," but rather the hazards caused by bioaccumulation of deposited mercury in fish consumed by people. See, *e.g.*, 77 Fed. Reg. at 9363-64. Similarly misleading is UARG's suggestion (p. 14) that EPA's statement regarding "chronic" exposures to acid gases meant that these toxic pollutants pose no health risks—in fact, acid gases can have potent acute effects on the health of those living near uncontrolled EGUs. See RIA 4-77 to -78; 77 Fed. Reg. at 9385 (noting hazard from "acute exposure" to hydrochloric acid); see also Comm. of Env. and Public Health Groups, EPA-HQ-OAR-2009-0234-18487, at III-10 to -11; Table III-1 (pp. III-8 and -9) (same).

[7] Amicus Murray Energy Corporation takes a different path from the petitioners, but is equally off course. Murray urges review on an issue not presented in the petitions for certiorari, one that Murray acknowledges (Br. 4) will never recur. Murray's claim that EPA should have relied instead upon 42 U.S.C. 7411 to regulate hazardous air pollutants from EGUs was

II. PETITIONERS' CHARACTERIZATIONS OF THE HEALTH HARMS AND BENEFITS ARE FALSE AND OVERWHELMINGLY REFUTED BY THE RECORD BEFORE EPA

Unable to cite any decisional conflict or exceptionally important principle of law, petitioners attempt to portray the D.C. Circuit decision as having upheld an extreme agency action, in which EPA pursued negligible public benefits at a very large cost to society. See, *e.g.*, UARG 3 (asserting that the Rule reflects a "ratio of $1 of 'benefit' for every $1,500 spent"); see also NMA 15 ("The regulation at issue indisputably entails massively high compliance costs for virtually no benefit from reducing HAP emissions."). But, whatever its relevance, this caricature is contradicted by the ample evidence before EPA. In fact, drawing from a wealth of evidence including that amassed in multiple statutorily-mandated, peer-reviewed scientific studies, see 77 Fed. Reg. at 9307, 9310-64, the agency found that emissions of hazardous air pollutants from EGUs pose serious hazards to public health and that the Air Toxics Rule would reduce these toxic emissions substantially.

While EPA concluded that Congress, in section 7412(n)(1)(A), intended the agency to focus on impacts to public health—leaving compliance costs to be addressed in the standard-setting process—EPA also found, as part of the Regulatory Impact Analysis required under Executive Orders 12,866 and 13,563, that the public benefits of the Rule would exceed the Rule's costs many-fold.

Petitioners' depiction of the Rule as imposing large and unreasonable net costs on society cherry-picks from parts of this same analysis. The extreme case that UARG invites this Court to "imagine" (UARG 2-3) in deciding whether to grant review does not resemble this case at all.

---

not presented to, or decided by, the court of appeals, nor, as far as we can discern, raised by Murray or other commenters in the rulemaking.

A. The Administrative Record Refutes Petitioners' Efforts to Trivialize the Serious Harms Caused by EGU Emissions of Congressionally-Designated Hazardous Air Pollutants

Petitioners attempt to minimize the public benefits of regulating hazardous air pollutants from EGUs—with petitioner NMA going so far as to say that the Rule's reductions in hazardous air pollution will provide "virtually no" benefit to the public. NMA 15. See also UARG 15 ("extraordinarily low" benefit); Michigan 2, 9.

The record shows those claims to be false. EGUs are "by far" the largest source category of mercury in the United States, representing 50 percent of total anthropogenic emissions, and, in 2005, EGUs accounted for "62 percent of total [arsenic] emissions, 39 percent of total [cadmium] emissions, 22 percent of total [chromium] emissions, 82 percent of total [hydrochloric acid] emissions, 62 percent of total [hydrogen fluoride] emissions, 28 percent of total [nickel] emissions, and 83 percent of total [selenium] emissions." 77 Fed. Reg. at 9310. See also 77 Fed. Reg. at 9338 (noting that EGUs are the "predominant source" of U.S. mercury emissions, particularly of the oxidized and particulate forms that are of "primary concern" for mercury deposition).[8]

EPA explained that the Rule "will reduce emissions of all the listed [hazardous air pollutants] that come from EGUs." 77 Fed. Reg. at 9444; see *id.* at 9306 (noting that emissions of non-mercury hazardous air pollutants will "decrease dramatically" under the Rule). See also 76 Fed. Reg. at 25,013–14 (EPA's updated technology assessment showing

---

[8] The aggregate amount of toxic air pollution emitted annually by U.S. EGUs is equally staggering: over 386,000 tons of 84 separate pollutants that Congress has designated as hazardous. See Comments of American Academy of Pediatrics, *et al.*, EPA-HQ-OAR-2009-0234-18435, at 2 (citing the most recent EPA National Emissions Inventory data at the time that the Air Toxics Rule was proposed).

availability of emission controls for hazardous pollutants). Indeed, the record demonstrates that because of the demonstrated efficacy of available controls for this highest-emitting category of sources, the Rule will yield deep reductions in *aggregate nationwide emissions* of many of the toxins Congress listed in 42 U.S.C. 7412(b)(1). EPA projected that the Rule would result in a 49 percent reduction in all anthropogenic emissions of hydrochloric acid gas and a 38 percent reduction in non-mercury metal hazardous air pollutants like arsenic, chromium, and nickel. 76 Fed. Reg. at 25,015. Similarly, the agency projected that the Rule would reduce total EGU emissions of mercury by 75 percent, and of hydrochloric acid by 88 percent. 77 Fed. Reg. at 9424. See also 76 Fed Reg. at 25,015 (proposed rule projected to result in "a 36 percent reduction of *total* anthropogenic [mercury] emissions nationally") (emphasis added).

Claims that reductions of this magnitude amount to "virtually no benefit" (NMA 15) for the public or are not what a "rational person" would pursue (NMA 5) amount to attacks on Congress's decision to designate these pollutants as hazardous under section 7412(b). See *Natural Res. Def. Council v. EPA*, 529 F.3d 1077, 1079 (D.C. Cir. 2008) (noting that, "[r]ather than have EPA list one-by-one those substances likely to be harmful," section 7412 as amended in 1990 enumerates substances that "Congress deemed to be hazardous"). The premise of section 7412 is that each of the listed compounds is sufficiently dangerous to warrant regulation because, even in relatively small doses, these pollutants "pose especially serious health risks," such as "cancer, neurological disorders, reproductive dysfunctions, other chronic health effects, or adverse acute human health effects." House Rep. No. 101-490 at 315 (1990). See also, *e.g.*, 42 U.S.C. 7412(c)(9)(B)(i) (delisting of sources only permitted if "no source" in category emits pollutants in amount "which may cause a lifetime risk of cancer greater than one in one million" to the "most exposed individual").

In any event, the voluminous record contains extensive evidence concerning the varied and serious health hazards associated with these pollutants. See 77 Fed. Reg. at 9310; 76 Fed. Reg. at 25,000–05. In the 2000 finding, EPA determined that mercury posed a serious threat to public health and the environment, and that non-mercury metals pose cancer risks. 65 Fed. Reg. at 79,827. In 2011, EPA reaffirmed those findings and, on the basis of additional studies, found "that emissions from coal- and oil-fired EGUs continue to pose a hazard to public health," and "pose a hazard to the environment as well." 77 Fed. Reg. at 9320. See also *id.* at 9335 ("U.S. EGUs are the most significant sources of [hazardous air pollutants] in the country that remains unaddressed by Congress's air toxics program.").

As to mercury, EPA found in 2000, *inter alia*, that approximately seven percent of women of childbearing age (which means nearly four million women) were exposed to methylmercury at levels that exceed a health-protective level, the "reference dose." See 76 Fed. Reg. at 24,995; 65 Fed. Reg. at 79,829. Of these, about 580,000 women were exposed to amounts three to four times the reference dose, an exposure that can cause debilitating neurodevelopmental problems for children, see 76 Fed. Reg. at 24,995. EPA's further review in the 2011 decision included a peer-reviewed mercury risk assessment finding that EGU emissions in 2016 would cause or significantly contribute to human exposures exceeding health-protective levels in 24 percent of the 3,100 watersheds modeled, 77 Fed. Reg. at 9339; an assessment of EGU-attributable mercury deposition confirmed significantly higher deposition in areas nearest high-emitting EGUs, 76 Fed. Reg. at 25,013.

Non-mercury metals like chromium and nickel, among other hazards, pose cancer risks. 76 Fed. Reg. at 25,011; 77 Fed. Reg. at 9319 (discussing a peer-reviewed inhalation study finding that chromium and nickel emissions from 6 of 16 modeled facilities would pose lifetime cancer risks greater than one in one million). And recognizing that EGUs account

for an overwhelming share of the toxic acid gases emitted in the U.S., EPA noted its concern "about the potential for acid gas emissions to add to already high atmospheric levels of other chronic respiratory toxicants." 76 Fed. Reg. at 25,016. *See also* 77 Fed. Reg. at 9363, 9405–06. Compare UARG 16 (asserting, incorrectly, that EPA "concluded that acid gas emissions pose no health risk").[9]

EPA also found that the pollution reductions brought about by the Rule would reduce harm in areas currently exposed to the highest risks. See 77 Fed. Reg. at 9446, and to vulnerable populations, *e.g.*, *id.* at 9445 (projecting "substantial health improvements for children").

Petitioners' efforts to trivialize the health benefits of these enormous reductions in toxic emissions are based upon a sleight of hand. Petitioners repeatedly cite the $4–6 million per year figure that EPA—in the Regulatory Impact Analysis—assigned to *one* category of benefits (avoided losses relating to lower IQ points in children from prenatal exposure to methylmercury from subsistence consumption of freshwater fish) as if that were the *only* health benefit of regulating hazardous air pollutants. UARG 15 (asserting that

---

[9] NMA complains that the Rule improperly subjects all hazardous air pollutants emitted by EGUs to section 7412(d) standards. NMA 26–28. However, the D.C. Circuit repeatedly has held that section 7412(d) establishes a "clear statutory obligation to set emission standards for each listed [hazardous pollutant]" emitted by major sources. *Sierra Club v. EPA*, 479 F.3d 875, 883 (D.C. Cir. 2007); *Nat'l Lime Ass'n v. EPA*, 233 F.3d 625, 634 (D.C. Cir. 2000). NMA claims that the D.C. Circuit below "misread" its own precedent by concluding that the same rule applies to EGUs, NMA 26, but NMA is wrong. Section 7412(n)(1)(A) specifies that EGU regulation is to proceed "under this section," requiring EPA to promulgate MACT standards for each listed hazardous air pollutant. See also UARG 14–15 (proposing alternative, extra-statutory regime in which EPA must make finding as to each hazardous pollutant emitted by EGUs, and then regulate only "to the extent appropriate and necessary").

"EPA found the health benefits of HAP reductions under its program would be extraordinarily low (just $4–6 million, all from reducing mercury)"). But as EPA carefully explained, this represented only one subset of the many benefits of mercury reductions, the only one for which EPA had data enabling it to assign a monetary value. Indeed, reducing mercury alone was forecast to produce a wide variety of other benefits that EPA identified, but was unable to quantify. See RIA, Sections 4.2 and 4.3 (CA App. 2301–05). Similarly, EPA described, but did not monetize, "important benefits" from reductions in other hazardous air pollutants. 77 Fed. Reg. at 9306. The agency described 60 distinct categories of unquantifiable health and environmental gains from the Rule's pollution reductions.[10]

EPA explained that it "could not monetize some costs and important benefits, such as some [mercury] benefits and those for the [non-mercury hazardous air pollutants]," but that "[u]pon considering these limitations and uncertainties, it remains clear that the benefits of this rule . . are substantial and far outweigh the costs." 77 Fed. Reg. at 9306.

Contrary to petitioners' dismissive claims, the rulemaking record demonstrates that the Air Toxics Rule achieves massive reductions in emissions of congressionally-designated hazardous air pollutants from the highest-emitting source category; the record also confirms what was the very premise of Congress's designation of these pollutants under section 7412(c)(1): that major reductions in emissions of these pollutants will importantly benefit public health. There is

---

[10] RIA at ES-9 to -13 (CA App. 2279–84); see also 77 Fed. Reg. at 9428 ("The EPA recognizes that these calculated benefits are a small subset of the benefits of reducing [mercury] emissions."); Response to Comment, Vol. 2 at 623 (CA App. 2241) (benefits of reductions in non-mercury pollutants were "not quantified due to data, resource and methodological limitations"); RIA Ch. 4 (CA App. 2301–2400) (discussing broad range of these benefits). EPA also explained why data and methodological limitations prevented further quantification, *e.g.*, RIA at 4-1, 4-2 (CA App. 2301–02).

nothing anywhere in section 7412 that requires EPA to consider only those benefits of reducing air toxics that can be assigned a dollar value—a rule that would be directly contrary to the entire protective thrust of the program.

B. EPA's Assessment of Quantified Costs and Benefits Demonstrates that Petitioners' Portrayals of the Rule's Economic Impacts Are Wrong

In the same economic analysis from which petitioners selectively borrow, EPA found that the Air Toxics Rule would have "annual monetized benefits (in 2007 [dollars]) of between $37 to $90 billion using a 3 percent discount rate and $33 to $81 billion using a 7 percent discount rate." 77 Fed. Reg. at 9305. Again, because these do not include the benefits EPA was unable to monetize, EPA acknowledged the likelihood that its analysis substantially *understates* the Rule's total benefits. *Id.* at 9306 (Table 2), 9428. The Rule's monetized benefits arise largely from the reductions in fine particulate pollution—reductions that EPA estimated would, in 2016 alone, avoid "4,200 to 11,000 premature deaths, 4,700 nonfatal heart attacks, 2,600 hospitalizations for respiratory and cardiovascular diseases, 540,000 lost work days, and 3.2 million days when adults restrict normal activities because of respiratory symptoms exacerbated by PM2.5." RIA ES-3 (CA App. 2273). Compared to EPA's estimate of the Rule's annual costs at $9.6 billion, 77 Fed. Reg. at 9306, these quantified benefits yield a benefits to costs ratio ranging between more than 3:1 to more than 9:1.

In their effort to "imagine" an unreasonably costly regulation, see UARG 2–3, some petitioners insist that EPA's benefits calculation should be disregarded because it relied on health gains attributable to reductions in particulate matter, rather than pollutants listed under section 7412(b). See NMA 4–5, 22; see also UARG 15–16 (complaining of a "gross imbalance of costs and benefits," while ignoring most of the monetized benefits identified by EPA).

As an initial matter, any sharp dichotomy between particulate matter and hazardous air pollutants is artificial. Certain of the most risk-relevant species of mercury, as well as many toxic metals like arsenic, cadmium and chromium, are *part of* the fine particulate matter emitted by EGUs—and EPA found that the way to control these hazardous pollutants was by controlling particulate matter. See, *e.g.*, 77 Fed. Reg. at 9402. See also *id.* at 9337-38 (noting that particulate mercury is one of the species of "primary concern" for mercury deposition).

More fundamentally, EPA's decision, in the Regulatory Impact Analysis, to take account of the ancillary benefits of regulation adhered to basic tenets of standard cost-benefit analysis. The applicable Executive Orders require federal agencies to assess all impacts of significant rulemakings on the economy, government, health, safety, and environment, including both direct and indirect effects, and both benefits and costs. Exec. Order 12,866 § 1, 58 Fed. Reg. 51,735 (Sept. 30, 1993); *see also* Exec. Order 13,563 § 1(b), 76 Fed. Reg. 3821 (Jan. 18, 2011). Guidance from the Office of Management and Budget, similarly, emphasizes that agencies must consider both direct and ancillary benefits and costs. *Circular A-4* 26 (2003). EPA's cost-benefit handbook, adopted after extensive peer review, prescribes equal treatment of "all identifiable costs and benefits," without distinguishing between direct and indirect ones. Nat'l Ctr. for Envtl. Econ., EPA, *Guidelines for Preparing Economic Analyses* 11-1 (2010). Leading authorities emphasize that same point. *E.g.*, E.J. Mishan & Euston Quah, *Cost Benefit Analysis* 104 (5th ed. 2007); Richard L. Revesz & Michael A. Livermore, *Retaking Rationality* 55–65 (2008); Christopher C. DeMuth & Douglas H. Ginsburg, *Rationalism in Regulation*, 108 Mich. L. Rev. 877, 888 (2010). Ancillary effects like reducing (or increasing) emissions of other pollutants are part of any proper cost-benefit analysis. Petitioners' selective accounting—which cites snippets of EPA's Regulatory Impact Analysis, but then disregards

inconvenient parts, including the largest categories of monetized benefits—merely substitutes their preferred (and badly skewed) cost-benefit approach for EPA's.[11] The record shows that, under a cost-benefit analysis following standard practices, the Air Toxics Rule is highly cost-beneficial; the facts simply fail to support petitioners' contentions that there is some overriding practical need to import a cost-consideration requirement into section 7412(n)(1)(A).

EPA reasonably interpreted section 7412(n)(1)(A) to not make the initial decision whether to regulate electric generating units turn on cost. It was enough, under the statute, that EGUs emit numerous congressionally-listed air toxics in massive volumes and that these emissions pose hazards that can be mitigated with readily available control technologies already in widespread use in the industry. Given how the statute is structured, with cost concerns being built into the process for setting standards, petitioners' claims about wildly disproportionate regulatory costs is an inherently unlikely scenario; but EPA's analysis of the Rule's benefits and costs, conducted pursuant to the Executive Orders and according to

---

[11] Petitioners' efforts to portray the Rule as unreasonably burdensome ring false in other ways as well. The Rule's effect is simply to require those EGUs that have chosen not to install or operate readily available controls to do what their peers have already done. When the final rule was approved, EPA found that 69 coal-fired EGUs already "meet all of the final existing source MACT emissions limits," 77 Fed. Reg. at 9387, and "[a]t the end of 2012" — more than two years before the Rule's initial compliance date — "64.3% of the U.S. coal generating capacity in the electric power sector already had the appropriate environmental control equipment to comply with the [Air Toxics Rule]." Energy Information Administration, Coal-Fired Power Plant Operators Consider Emissions Compliance Strategies, Today in Energy (March 28, 2014) (available at http://www.eia.gov/todayinenergy/detail.cfm?id=15611). The Rule's three-year lead time provides EGUs lacking compliant controls ample time to install them; the Rule also provides for (and many sources have obtained) one-year compliance exemptions, allowing until well into 2016 to begin meeting the Rule's requirements, see *id.* Without the emissions limits imposed by the Air Toxics Rule, a significant number of the units that have already installed controls would not be required to operate them.

standard principles, shows petitioners' claims to be not just unfounded, but exactly backwards.

CONCLUSION

The petitions should be denied.

Respectfully submitted.

John Suttles
Southern Environmental Law Center
601 W. Rosemary St.
Suite 220
Chapel Hill, NC 27516
(919) 967-1450
jsuttles@selc.org

Counsel for American Academy of Pediatrics, American Lung Association, American Nurses Association, American Public Health Association, and Physicians for Social Responsibility

Sean H. Donahue
Counsel of Record
David T. Goldberg
Donahue & Goldberg, LLP
1130 Connecticut Ave., NW
Suite 950
Washington, D.C. 20036
(202) 277-7085
sean@donahuegoldberg.com

Vickie L. Patton
Graham McCahan
Tomás Carbonell
Environmental Defense Fund
2060 Broadway
Boulder, CO 80302
(303) 447-7216

Counsel for Environmental Defense Fund

Ann Brewster Weeks
Darin T. Schroeder
Clean Air Task Force
18 Tremont St., Ste. 530
Boston, MA 02108

Counsel for Citizens for Pennsylvania's Future, Conservation Law Foundation, Environment America, Izaak Walton League of America, Natural Resources Council of Maine, and Ohio Environmental Council

John D. Walke
Natural Resources
Defense Council
1152 15th St. NW
Suite 300
Washington, D.C. 20005

Counsel for Natural Resource Defense Council

James S. Pew
Neil E. Gormley
Earthjustice
1625 Massachusetts Ave.,
NW, Suite 702
Washington, D.C. 20036

Counsel for Chesapeake Bay Foundation, Clean Air Council, National Association for the Advancement of Colored People, Sierra Club, and Waterkeeper Alliance

Sanjay Narayan
Sierra Club
85 Second St., 2nd Floor
San Francisco, CA 94105

Counsel for Sierra Club